CLAIMS

What is claimed is:

1. An improved atomizer of the type in which a fluid housed inside a container is ejected through a nozzle, the improvement comprising:

a bottle operable as said container to hold said fluid, said bottle comprising a generally cylindrical portion; and

a resilient element adapted to engage a wall of said cylindrical portion of said bottle at one or more locations along an axis of said bottle, said resilient element having a diameter larger than the cylindrical portion of said bottle so as to permit suspension of said bottle, by said resilient element, in a receiving socket of a storage device.

2. The improved atomizer of claim 1, further comprising:

an extension conduit between a pump mechanism and an atomizing nozzle, said extension conduit being malleable and deformable to permit orientation of a direction of discharge from said nozzle.

3. The improved atomizer of claim 2, in combination with:

a brace with a first end adapted for engagement with said bottle, and a second end carrying structure adapted to engage said conduit at a location spaced apart distally from said pump mechanism, said brace being operable to resist movement of said nozzle during actuation of said pump mechanism.

4. The improved atomizer of claim 3, wherein:

the first end of said brace is configured and arranged to form a clip-on attachment to a portion of said bottle.

5. The improved atomizer of claim 3, wherein:

the second end of said brace is configured and arranged to form a clip-on attachment to said conduit.

6. The improved atomizer of claim 3, wherein:

damping structure carried at the second end of said brace is configured and arranged to resist motion, induced by said pump-mechanism, of a portion of said conduit distal to said damping structure.

7. The improved atomizer of claim 3, wherein:

said pump mechanism comprises a pump head displaceable by a human digit through a vertical distance between a first and a second elevation; and

said brace is configured and arranged to hold said conduit to provide a fulcrum location at a third elevation, said third elevation being approximately midway between said first and said second elevations, so as to reduce a horizontal displacement of the fulcrum during vertical actuation of said pump mechanism.

8. A stabilized pump-bottle fluid atomizer, comprising:

a pump mechanism operable to pressurize a fluid contained in a pump-bottle, said pump mechanism comprising a pump head displaceable by a human digit through a vertical distance between a first and a second elevation;

a conduit between said pump head and a fluid atomizing nozzle; and

a brace between said pump-bottle and said conduit, said brace being configured and arranged to hold said conduit so as to resist motion of said nozzle during actuation of said pump mechanism.

9. The stabilized pump-bottle fluid atomizer of claim 8, wherein:

said conduit comprises a distal portion deformable to orient a fluid discharge direction of said nozzle.

10. The stabilized pump-bottle fluid atomizer of claim 8, wherein:

structure carried by said brace is adapted to provide a fulcrum location for localized bending of said conduit at a third elevation, said third elevation being approximately midway between said first and said second elevations so as to reduce a horizontal displacement of the fulcrum during vertical actuation of said pump mechanism.

11. The stabilized pump-bottle fluid atomizer of claim 8, wherein:

said brace is adapted for removable attachment to the conduit.

12. The stabilized pump-bottle fluid atomizer of claim 11, wherein:

said pump head is adapted for removable attachment to said pump mechanism, so as to permit replacement of an assembly comprising said pump head, the conduit, and said atomizing nozzle.

13. The stabilized pump-bottle fluid atomizer of claim 8, further comprising:

a resilient element adapted to engage a wall of a cylindrical portion of said pump-bottle at one or more locations along an axis of said pump-bottle, said resilient element having a diameter larger than said cylindrical portion of said pump-bottle so as to permit suspension of said pump-bottle by said resilient element in a socket of a storage device.

14. A pump-bottle fluid atomizer, comprising:

a bottle structured to hold a fluid;

a pump mechanism operable to pressurize said fluid in said bottle, said pump mechanism comprising a pump head displaceable by a human digit through a vertical distance between a first and a second elevation; and

a conduit between said pump head and a fluid atomizing nozzle, said conduit comprising a malleable and deformable portion permitting orientation of a direction of discharge from said nozzle.

15. The pump-bottle fluid atomizer of claim 14, further comprising:

a brace between said bottle and said conduit, said brace being operable to reduce motion of said nozzle during actuation of said pump mechanism.

16. The pump-bottle fluid atomizer of claim 15, wherein:

said brace comprises a first end and a second end;

the first end being adapted for attachment to said bottle; and

the second end being adapted for removable attachment to said conduit at a location spaced apart distally from said pump head.

17. The pump-bottle fluid atomizer of claim 16, wherein:

the second end of said brace is configured and arranged to form a clip-on attachment to a portion of said conduit between said pump head and said nozzle.

18. The pump-bottle fluid atomizer of claim 16, wherein:

a proximal portion of said conduit, located between said pump head and structure carried at the second end of said brace, is configured and arranged to reduce a horizontal deflection of said nozzle during actuation of said pump mechanism.

19. The pump-bottle fluid atomizer of claim 16, wherein:

said brace is configured and arranged to produce a fulcrum about which said conduit may bend so as to allow a vertical deflection of a proximal portion of said conduit and accommodate actuation of said pump mechanism; the fulcrum being located at a third elevation approximately midway between said first and second elevations to reduce a horizontal motion induced in the fulcrum by the vertical deflection of said proximal portion of said conduit.

20. The pump-bottle fluid atomizer of claim 14, further comprising:

a resilient element adapted to engage a wall of said bottle at one or more locations along an axis of said bottle, a combined cross-section of said resilient element and said wall having a size to permit suspension of said bottle by said resilient element in a socket of a commercially available storage device.

21. An atomizer assembly for use with a pump-bottle atomizer, comprising:

an extension conduit attached for fluid flow at a first end to a pump head and attached for fluid flow at a second end to a fluid atomizing nozzle, said pump head being configured and arranged for fluid flow engagement with a pump mechanism of said pump bottle, wherein:

said conduit comprises a deformable portion operable to orient a discharge from said nozzle in a plurality of user defined directions.

22. The atomizer assembly of claim 21, wherein said conduit comprises a multilumen conduit.

23. The atomizer assembly of claim 22, further comprising a deformable wire disposed in one conduit of said multilumen conduit.

24. The atomizer assembly of claim 23, in combination with:

a pump-bottle; and

a brace disposed between said pump-bottle and said conduit, said brace being operable to resist displacement of said nozzle during actuation of said pump mechanism.

25. The atomizer assembly combination of claim 24, wherein:

a proximal portion of said conduit, disposed between said pump head and an attach location on said conduit for structure carried by said brace, can be arranged in a nonlinear configuration so as to permit vertical displacement of said pump head to actuate said pump mechanism while reducing a correspondingly required horizontal displacement of said attach structure.